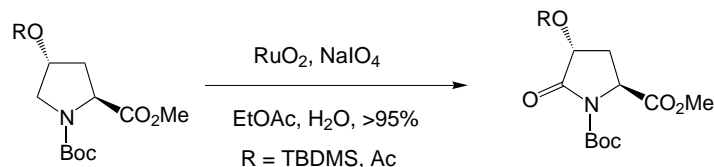
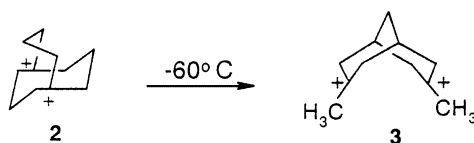


**A convenient and high yield method to prepare 4-hydroxypyroglutamic acids***Tetrahedron Letters 42 (2001) 5335*

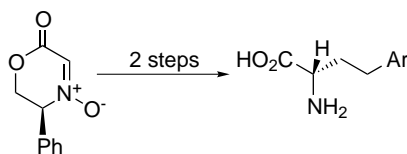
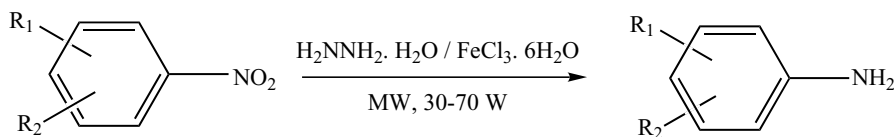
Xiaojun Zhang,\* Aaron C. Schmitt and Wen Jiang

*Chemical & Physical Sciences, DuPont Pharmaceuticals Company, Experimental Station, PO Box 80500, Wilmington, DE 19880, USA***A deepseated carbocationic rearrangement. Limited paths because of charge repulsion***Tetrahedron Letters 42 (2001) 5339*

Christoph Taeschler and Ted S. Sorensen\*

*Department of Chemistry, University of Calgary, Calgary, Alberta, Canada, T2N 1N4***Enantioselective syntheses of homophenylalanine derivatives via nitron 1,3-dipolar cycloaddition reactions with styrenes***Tetrahedron Letters 42 (2001) 5343*

Alan Long and Steven W. Baldwin\*

*Paul M. Gross Chemical Laboratory, Department of Chemistry, Duke University, Durham, NC 27708-0346, USA***Solvent-free reduction of aromatic nitro compounds with alumina-supported hydrazine under microwave irradiation***Tetrahedron Letters 42 (2001) 5347*András Vass,<sup>a</sup> József Dudás,<sup>a</sup> Judit Tóth<sup>a</sup> and Rajender S. Varma<sup>b,\*</sup><sup>a</sup>*Research Institute of Chemical and Process Engineering, University of Kaposvár, H-8200, Veszprém, Egyetem u.2, Hungary*<sup>b</sup>*Clean Processes Branch, National Risk Management Research Laboratory, U.S. Environmental Protection Agency, MS 443, 26 W. Martin Luther King Drive, Cincinnati, OH 45268, USA*Where  $\text{R}_1 = \text{R}_2 = \text{H}, \text{OH}, \text{OCH}_3, \text{CH}_3, \text{Cl}, \text{I}, \text{NH}_2$ , etc.

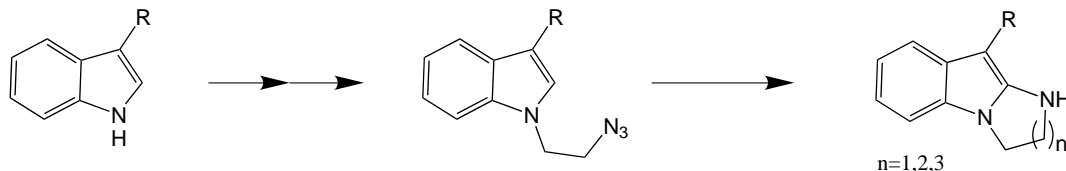
### Synthesis of tricyclic-2-aminoindoles by intramolecular 1,3-dipolar cycloaddition of 1- $\omega$ -azidoalkylindoles

*Tetrahedron Letters 42 (2001) 5351*

Marco A. de la Mora,<sup>a</sup> Erick Cuevas,<sup>a</sup> Joseph M. Muchowski<sup>b</sup> and Raymundo Cruz-Almanza<sup>a,\*</sup>

<sup>a</sup>*Instituto de Química, UNAM. Circuito Exterior, Ciudad Universitaria, Coyoacán 04510, Mexico, D.F.*

<sup>b</sup>*Roche Bioscience, 3401 Hillview Avenue, Palo Alto, CA 94304-1320, USA*

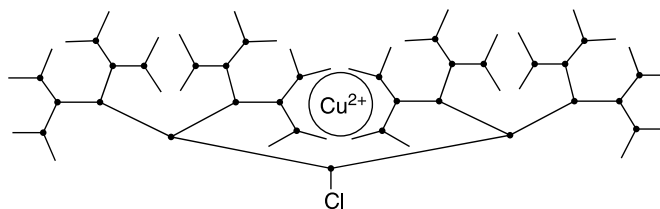


### Synthesis and characterization of higher generation dendrons based on melamine using *p*-aminobenzylamine. Evidence for molecular recognition of Cu(II)

*Tetrahedron Letters 42 (2001) 5355*

Wen Zhang and Eric E. Simanek\*

*Department of Chemistry, Texas A&M University, College Station, TX 77843, USA*



### Synthesis of a hybrid analog of the acetylcholinesterase inhibitors huperzine A and huperzine B

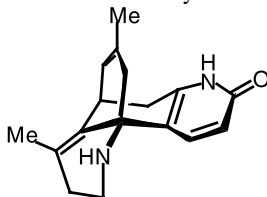
*Tetrahedron Letters 42 (2001) 5359*

V. Rajendran,<sup>a</sup> Suo-Bao Rong,<sup>a</sup> Ashima Saxena,<sup>b</sup> Bhupendra P. Doctor<sup>b</sup> and Alan P. Kozikowski<sup>a,\*</sup>

<sup>a</sup>*Drug Discovery Program, Dept. of Neurology, Georgetown University Medical Center, 3900 Reservoir Road, Washington, DC 20007-2197, USA*

<sup>b</sup>*Division of Biochemistry, Walter Reed Army Institute of Research, Washington, DC 20307-5100, USA*

The synthesis of a new hybrid analog of the acetylcholinesterase inhibitors huperzine A and B is reported. An intramolecular reductive dicarbonyl coupling was used as a key reaction for constructing the tetracyclic ring system.

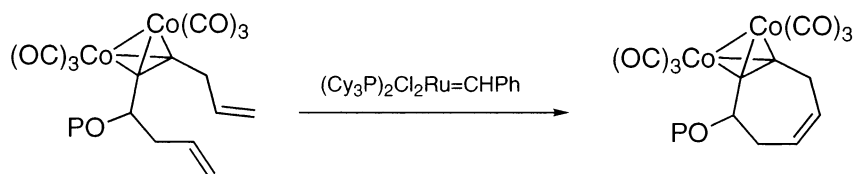


### Metathesis in the presence of a transition metal alkyne complex

*Tetrahedron Letters 42 (2001) 5363*

Joseph A. Burlison, Janet M. Gray and David G. J. Young\*

*Department of Chemistry, University of Tennessee, Knoxville, Knoxville, TN 37996, USA*



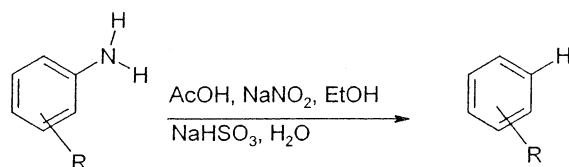
### Chemoselective one-pot reductive deamination of aryl amines

*Tetrahedron Letters* 42 (2001) 5367

Otto J. Geoffroy,<sup>a</sup> Thomas A. Morinelli<sup>b</sup> and G. Patrick Meier<sup>a,b</sup>

<sup>a</sup>Department of Pharmaceutical Sciences, Medical University of South Carolina, Charleston, SC 29425, USA

<sup>b</sup>Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC 29425, USA



### Synthesis of fipronil sulfide, an active metabolite, from the parent insecticide fipronil

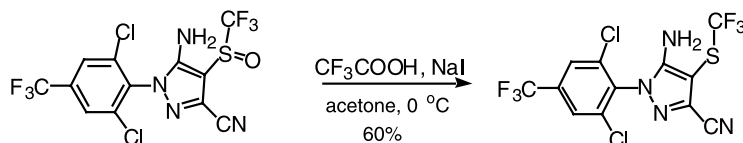
*Tetrahedron Letters* 42 (2001) 5371

Aaron B. Beeler,<sup>a</sup> Daniel K. Schlenk<sup>c</sup> and John M. Rimoldi<sup>a,b,\*</sup>

<sup>a</sup>Department of Medicinal Chemistry, University of Mississippi, MS 38677, USA

<sup>b</sup>Research Institute of Pharmaceutical Sciences, University of Mississippi, MS 38677, USA

<sup>c</sup>Department of Environmental Sciences, University of California, Riverside, Riverside, CA 92521 USA

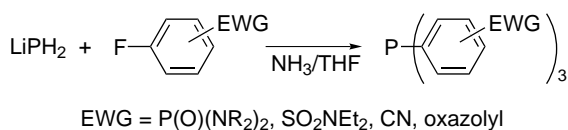


### Synthesis of symmetrical triarylphosphines from aryl fluorides and red phosphorus: scope and limitations

*Tetrahedron Letters* 42 (2001) 5373

Terence L. Schull,<sup>\*</sup> Susan L. Brandow and Walter J. Dressick

Center for Bio/Molecular Science and Engineering, Code 6950, U.S. Naval Research Laboratory, 4555 Overlook Avenue, SW, Washington, DC 20375-5348, USA



### A shortcut to the smaller fragment of pamamycin-607

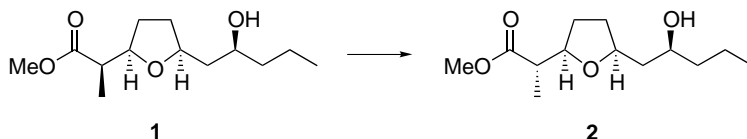
*Tetrahedron Letters* 42 (2001) 5377

Heiko Bernsmann,<sup>a</sup> Margit Gruner,<sup>a</sup> Roland Fröhlich<sup>b</sup> and Peter Metz<sup>a,\*</sup>

<sup>a</sup>Institut für Organische Chemie, Technische Universität Dresden, Mommsenstraße 13, D-01062 Dresden, Germany

<sup>b</sup>Organisch-Chemisches Institut, Universität Münster, Corrensstraße 40, D-48149 Münster, Germany

Methyl ester **2** of the title compound was prepared from **1** by a three-step route involving Yamaguchi lactonization with concomitant C(2) epimerization as well as by one-step C(2) epimerization of **1**.



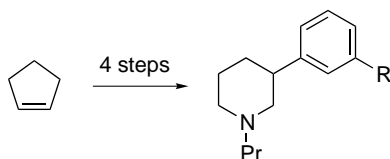
### A rapid and general access to 3-arylpiperidines

Isabel K. Büchner and Peter Metz\*

*Institut für Organische Chemie, Technische Universität Dresden, Mommsenstraße 13, D-01062 Dresden, Germany*

A short and efficient synthetic sequence to produce a wide variety of 3-arylpiperidines from three simple building blocks is described. The key step is a palladium-catalyzed arylation of cyclopentene.

*Tetrahedron Letters 42 (2001) 5381*

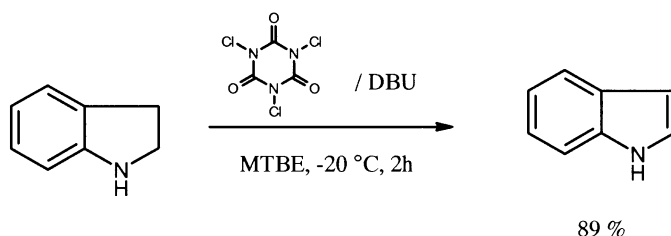


### A mild and efficient dehydrogenation of indolines

Ulf Tilstam,\* Michael Harre, Thilo Heckrodt and Hilmar Weinmann

*Process Research, Schering AG-Berlin, D-13342 Berlin, Germany*

*Tetrahedron Letters 42 (2001) 5385*

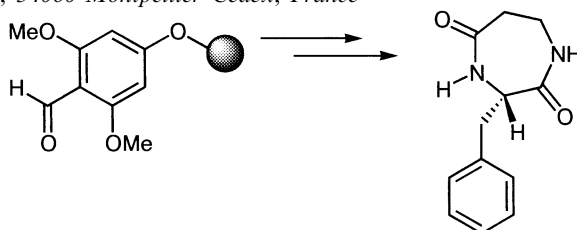


### Solid-phase synthesis of 3,7-disubstituted perhydro-1,4-diazepine-2,5-diones from amino acids and $\beta$ -amino acids

Jérôme Giovannoni, Gilles Subra, Muriel Amblard\* and Jean Martinez

*Laboratoire des Aminoacides Peptides et Protéines (LAPP), UMR5810-CNRS, Universités Montpellier I et II, Faculté de Pharmacie, 15 Av. C. Flahault, 34060 Montpellier Cédex, France*

*Tetrahedron Letters 42 (2001) 5389*

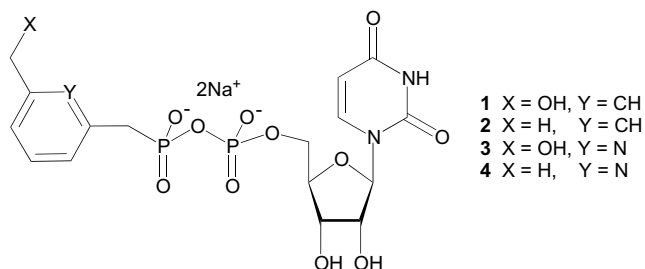


### Design and synthesis of aryl/hetarylmethyl phosphonate-UMP derivatives as potential glucosyltransferase inhibitors

Asish K. Bhattacharya, Florian Stolz and Richard R. Schmidt\*

*Fachbereich Chemie, Universität Konstanz, Fach M725, D-78457 Konstanz, Germany*

*Tetrahedron Letters 42 (2001) 5393*



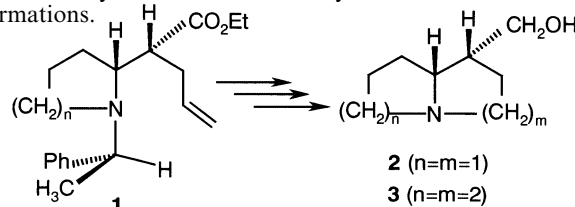
### Syntheses from chiral heterocyclic $\beta$ -amino esters. A new versatile access to pyrrolizidine and quinolizidine alkaloids

*Tetrahedron Letters 42 (2001) 5397*

Stéphane Ledoux, Elisabeth Marchalant, Jean-Pierre Célérier and Gérard Lhommet\*

Université Pierre et Marie Curie, Laboratoire de Chimie des Hétérocycles associé au CNRS, 4, Place Jussieu, F-75252 Paris cedex 05, France

Chiral heterocyclic  $\beta$ -amino esters can be easily transformed into bicyclic alkaloids after a diastereoselective alkylation followed by specific chemical transformations.



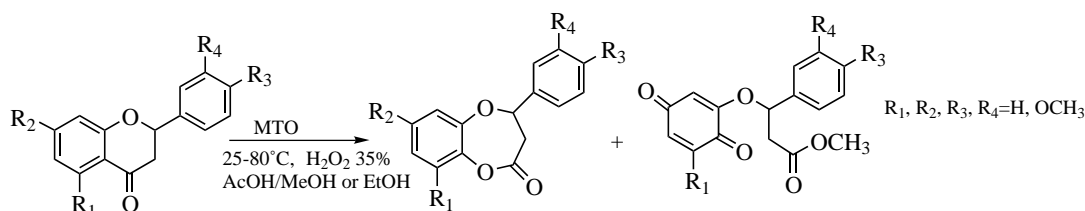
### A new and efficient Baeyer–Villiger rearrangement of flavanone derivatives by the methyltrioxorhenium/ $\text{H}_2\text{O}_2$ catalytic system

*Tetrahedron Letters 42 (2001) 5401*

Roberta Bernini,<sup>a,\*</sup> Enrico Mincione,<sup>a</sup> Manuela Cortese,<sup>a</sup> Giovanni Aliotta,<sup>b</sup> Anna Oliva<sup>b</sup> and Raffaele Saladino<sup>a,\*</sup>

<sup>a</sup>Dipartimento A.B.A.C., Università della Tuscia, Via S. Camillo de Lellis, 01100 Viterbo, Italy

<sup>b</sup>Dipartimento di Scienze della Vita, II<sup>a</sup> Università di Napoli, Via Vivaldi 43, 81100 Caserta, Italy



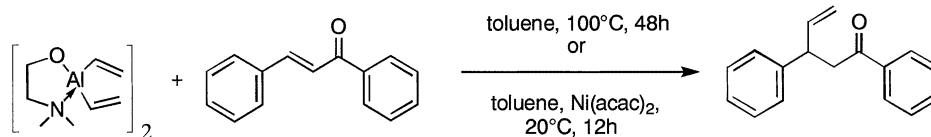
### $[(\text{CH}_2=\text{CH})_2\text{Al}(\mu\text{-OCH}_2\text{CH}_2\text{NMe}_2)_2]_2$ : a vinylalane reagent suitable for conjugate additions to $\alpha,\beta$ -unsaturated ketones

*Tetrahedron Letters 42 (2001) 5405*

Herbert Schumann,<sup>a,\*</sup> Jens Kaufmann,<sup>a</sup> Sebastian Dechert,<sup>a</sup> Hans-Günter Schmalz<sup>b</sup> and Janna Velder<sup>b</sup>

<sup>a</sup>Institut für Chemie, Technische Universität Berlin, Straße des 17. Juni 135, D-10623 Berlin, Germany

<sup>b</sup>Institut für Organische Chemie, Universität Köln, Greinstraße 4, D-50939 Cologne, Germany



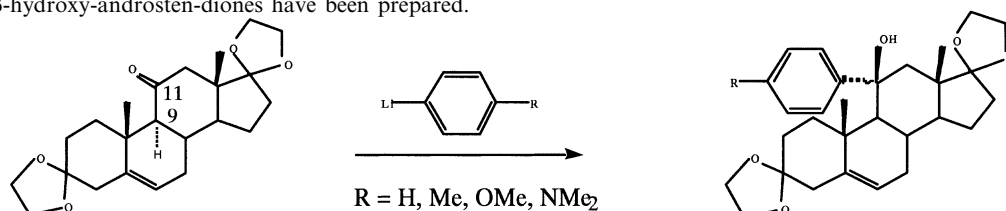
### Addition of aryllithiums to an 11-oxo-steroid

*Tetrahedron Letters 42 (2001) 5409*

Vincent Lecomte, Nicolas Foy, Franck Le Bideau, Elie Stéphan\* and Gérard Jaouen

Laboratoire de chimie organométallique, Ecole Nationale Supérieure de Chimie et CNRS, 11 rue Pierre et Marie Curie, 75005 Paris, France

The addition of aryllithiums to an 11-oxo-steroid is possible in non-polar medium and at room temperature. A series of protected 11 $\alpha$ -aryl-11 $\beta$ -hydroxy-androsten-diones have been prepared.

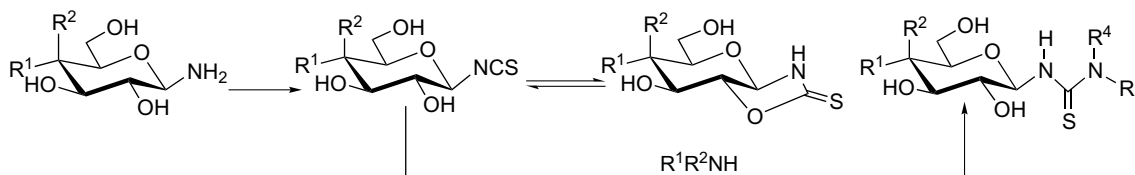


### A practical one-pot synthesis of *O*-unprotected glycosyl thioureas

*Tetrahedron Letters* 42 (2001) 5413

Inés Maya, Óscar López, José G. Fernández-Bolaños,\*  
Inmaculada Robina and José Fuentes

*Departamento de Química Orgánica, Facultad de Química, Universidad de Sevilla, Apartado 553, E-41071, Seville, Spain*

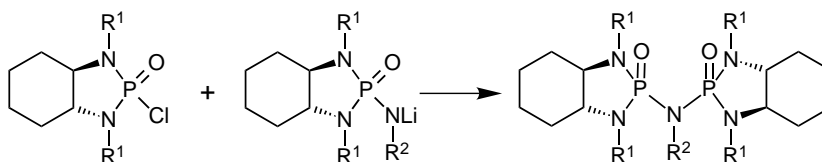


### A simple protocol for the synthesis of chiral bidentate imidodiphosphoric tetramide ligands: application in the metal-free asymmetric allylation of aldehydes

*Tetrahedron Letters* 42 (2001) 5417

Jasmin Hellwig, Thomas Belser and Jürgen F. K. Müller\*

*Institute of Inorganic Chemistry, University of Basel, Spitalstraße 51, CH-4056 Basel, Switzerland*

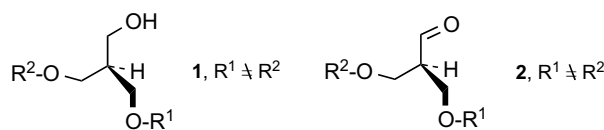


### First enantioselective non-biological synthesis of asymmetrised tris(hydroxymethyl)methane (THYM\*) and bis(hydroxymethyl)-acetaldehyde (BHYMA\*)

*Tetrahedron Letters* 42 (2001) 5421

Irene Izzo, Matteo Scioscia, Pasquale Del Gaudio and Francesco De Riccardis\*

*Dipartimento di Chimica, Università di Salerno, Via S. Allende, Baronissi-I-84081, Salerno, Italy*

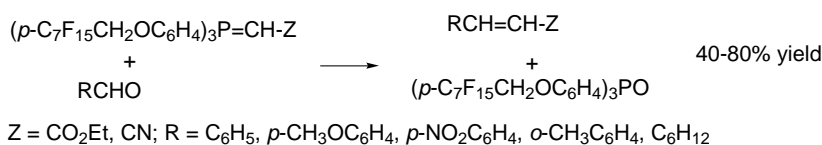


### Wittig reaction using perfluorinated ylides

*Tetrahedron Letters* 42 (2001) 5425

Aurélien Galante, Paul Lhoste and Denis Sinou\*

*Laboratoire de Synthèse Asymétrique, associé au CNRS, CPE Lyon, Université Claude Bernard Lyon 1, 43, boulevard du 11 novembre 1918, 69622 Villeurbanne Cedex, France*



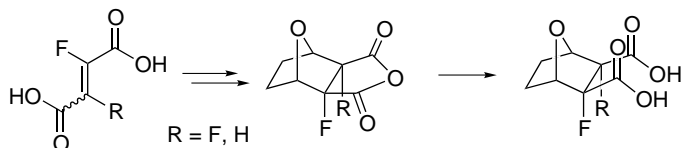
### Synthesis of the first fluorinated cantharidin analogues

Michael Essers, Birgit Wibbeling and Günter Haufe\*

*Tetrahedron Letters* 42 (2001) 5429

*Organisch-Chemisches Institut, Westfälische Wilhelms-Universität Münster, Corrensstrasse 40, D-48149 Münster, Germany*

Fluorinated cantharidin analogues have been synthesized for the first time. The key step in each synthesis is an *exo*-selective Diels–Alder reaction of furan with the appropriate fluorinated maleic anhydride.  $^{17}\text{O}$  NMR measurements of the new substances and the non-fluorinated parent compounds were undertaken to show the influence of the fluorine substituent(s) on the electronic properties of the oxygen atoms.



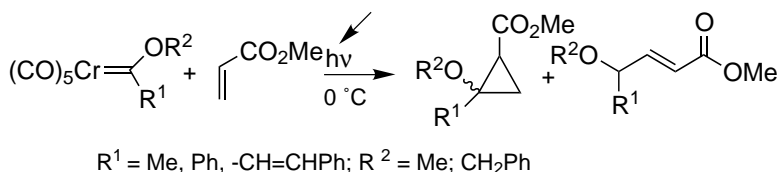
### Low temperature carbene transfer from alkoxychromium(0) (Fischer) carbene complexes

Miguel A. Sierra,\* Juan C. del Amo, María J. Mancheño and Mar Gómez-Gallego

*Departamento de Química Orgánica, Facultad de Química, Universidad Complutense, 28040 Madrid, Spain*

*Tetrahedron Letters* 42 (2001) 5435

Key to low temperature carbene transfer

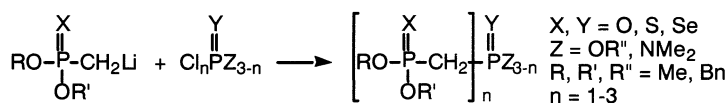


### Selenophosphonates as building blocks for the preparation of bis-methylene analogs of triphosphates

Stéphane Mons, Emmanuel Klein, Charles Mioskowski\* and Luc Lebeau\*

*Université Louis Pasteur de Strasbourg, Laboratoire de Synthèse Bioorganique associé au CNRS, Faculté de Pharmacie, 74, route du Rhin-BP 24-67 401 Illkirch, France*

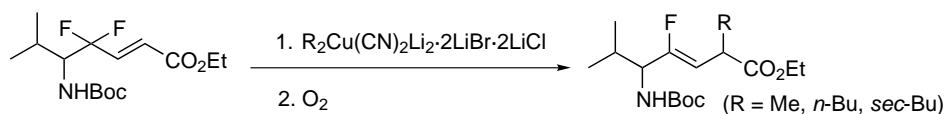
*Tetrahedron Letters* 42 (2001) 5439



### New access to $\alpha$ -substituted (*Z*)-fluoroalkene dipeptide isosteres utilizing organocopper reagents under 'reduction–oxidative alkylation (R-OA)' conditions

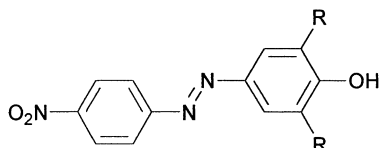
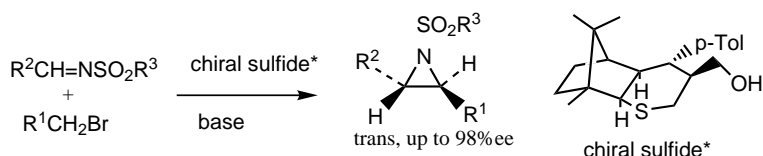
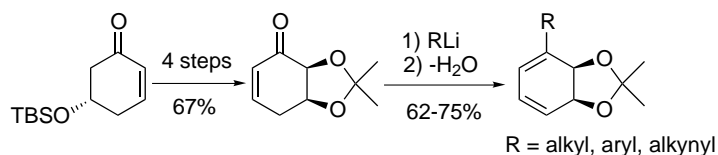
Akira Otaka,\* Hideaki Watanabe, Akira Yukimasa, Shinya Oishi, Hirokazu Tamamura and Nobutaka Fujii  
*Graduate School of Pharmaceutical Sciences, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan*

*Tetrahedron Letters* 42 (2001) 5443

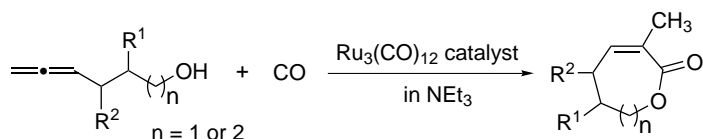


**Fluoride-selective chromogenic sensors based on azophenol***Tetrahedron Letters 42 (2001) 5447*Kwan Hee Lee,<sup>a</sup> Ho-Yong Lee,<sup>a</sup> Dong Hoon Lee<sup>a</sup> and Jong-In Hong<sup>a,b,\*</sup><sup>a</sup>*School of Chemistry and Molecular Engineering, Seoul National University, Seoul 151-742, South Korea*<sup>b</sup>*Center for Molecular Design and Synthesis, Taejeon 305-701, South Korea*

Azophenol dyes were used as an optical-signaling chromophoric unit to selectively trigger color change upon complexation with fluoride anion among various anions.

**Enantioselective synthesis of aziridines from imines and alkyl halides using a camphor-derived chiral sulfide mediator via the imino Corey–Chaykovsky reaction***Tetrahedron Letters 42 (2001) 5451*Takao Saito,<sup>\*</sup> Masao Sakairi and Daisuke Akiba*Department of Chemistry, Faculty of Science, Science University of Tokyo, Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan***Chemical synthesis of optically active *cis*-cyclohexa-3,5-diene-1,2-diols and their 5-<sup>2</sup>H-derivatives***Tetrahedron Letters 42 (2001) 5455*Takeshi Hanazawa, Sentaro Okamoto and Fumie Sato<sup>\*</sup>*Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa 226-8501, Japan***Direct synthesis of seven- and eight-membered lactones by ruthenium-catalyzed cyclocarbonylation of allenyl alcohols***Tetrahedron Letters 42 (2001) 5459*Eiji Yoneda, Shi-Wei Zhang, Kiyotaka Onitsuka and Shigetoshi Takahashi<sup>\*</sup>*The Institute of Scientific and Industrial Research, Osaka University, Mihogaoka, Ibaraki, Osaka 567-0047, Japan*

Carbonylation of 6-hydroxyhexa-1,2-dienes and 7-hydroxyhepta-1,2-dienes with a ruthenium catalyst in triethylamine quantitatively gave seven- and eight-membered lactones, respectively, in which the hydroxyl group of allenyl alcohols participated in the cyclization.



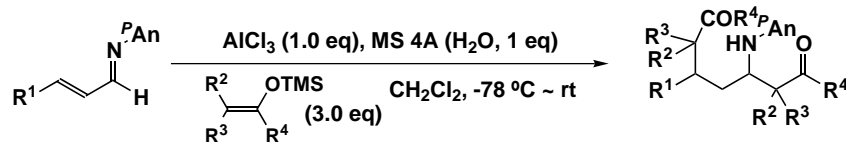


**Double nucleophilic addition reaction to  $\alpha,\beta$ -unsaturated aldimines promoted by aluminum chloride and a limited amount of water**

*Tetrahedron Letters 42 (2001) 5463*

Makoto Shimizu,\* Toshiki Ogawa and Takafumi Nishi

Department of Chemistry for Materials, Mie University, Tsu, Mie 514-8507, Japan

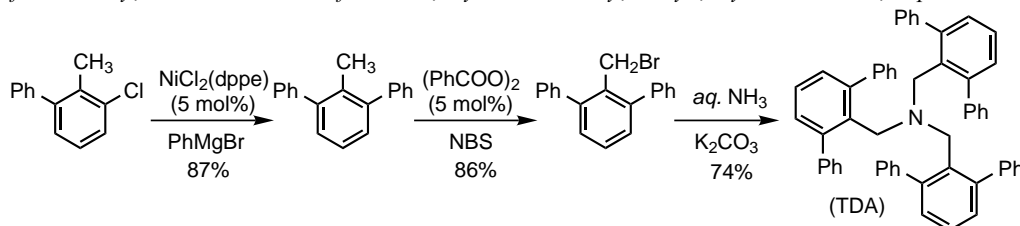


**Tris(2,6-diphenylbenzyl)amine (TDA) and tris(2,6-diphenylbenzyl)-phosphine (TDP) with unique bowl-shaped structures: synthetic application of functionalized TDA to chemoselective silylation of benzylic alcohols**

*Tetrahedron Letters 42 (2001) 5467*

Motoi Naiki, Seiji Shirakawa, Kana Kon-i, Yuichiro Kondo and Keiji Maruoka\*

Department of Chemistry, Graduate School of Science, Kyoto University, Sakyo, Kyoto 606-8502, Japan

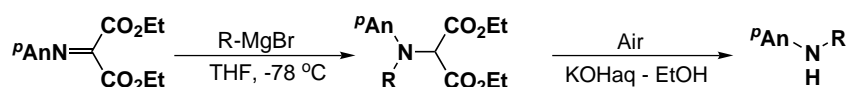


**Electrophilic amination with iminomalonate**

*Tetrahedron Letters 42 (2001) 5473*

Yasuki Niwa, Kazuki Takayama and Makoto Shimizu\*

Department of Chemistry for Materials, Mie University, Tsu, Mie 514-8507, Japan



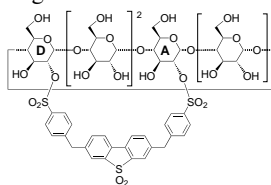
**Regioselective 2<sup>A</sup>,2<sup>D</sup>-disulfonyl capping of  $\beta$ -cyclodextrin for practical bifunctionalization on the secondary hydroxyl face**

*Tetrahedron Letters 42 (2001) 5477*

Katsunori Teranishi

Faculty of Bioresources, Mie University, 1515 Kamihama, Tsu, Mie 514-8507, Japan

Highly regioselective 2<sup>A</sup>,2<sup>D</sup>-disulfonylation of  $\beta$ -cyclodextrin has been achieved by a reaction of  $\beta$ -cyclodextrin using a combination of a novel disulfonyl imidazole reagent and molecular sieves in *N,N*-dimethylformamide.

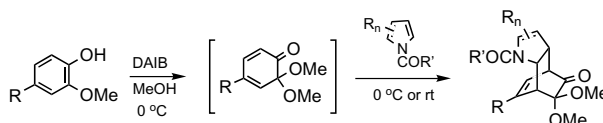


## Highly selective and facile Diels–Alder reactions of masked *o*-benzoquinones with pyrroles

Ming-Fang Hsieh, Rama Krishna Peddinti and Chun-Chen Liao\*

Department of Chemistry, National Tsing Hua University, Hsinchu 300, Taiwan

*Tetrahedron Letters* 42 (2001) 5481

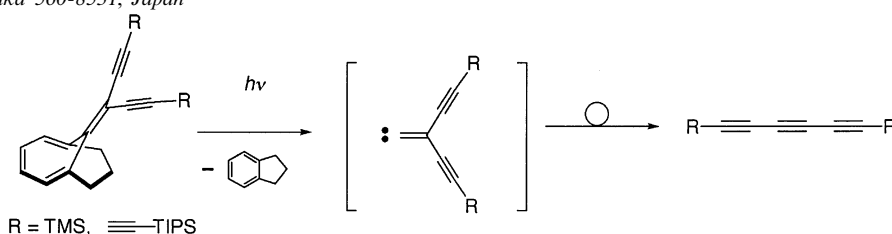


## Vinylidene to alkyne rearrangement to form polyynes: synthesis and photolysis of dialkynylmethylenebicyclo[4.3.1]deca-1,3,5-triene derivatives

Yoshito Tobe,\* Naruhito Iwasa, Rui Umeda and Motohiro Sonoda

Department of Chemistry, Faculty of Engineering Science, Osaka University, and CREST, Japan Science and Technology Corporation (JST), Toyonaka, Osaka 560-8531, Japan

*Tetrahedron Letters* 42 (2001) 5485



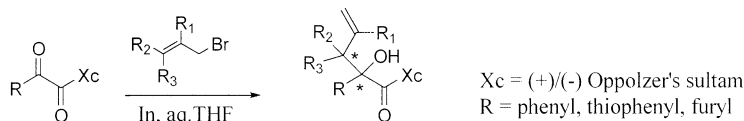
## Indium-mediated diastereoselective allylation reactions: preparation of *tert*- $\alpha$ -hydroxy acids

Jeong Ah Shin,<sup>a,b</sup> Joo Hwan Cha,<sup>a</sup> Ae Nim Pae,<sup>a</sup> Kyung Il Choi,<sup>a</sup> Hun Yeong Koh,<sup>a</sup> Han-Young Kang<sup>b,\*</sup> and Yong Seo Cho<sup>a,\*</sup>

<sup>a</sup>Biochemicals Research Center, Korea Institute of Science and Technology, PO Box 131, Cheongryang, Seoul 130-650, South Korea

<sup>b</sup>Department of Chemistry, Chungbuk National University, Cheongju, Chungbuk 361-763, South Korea

*Tetrahedron Letters* 42 (2001) 5489



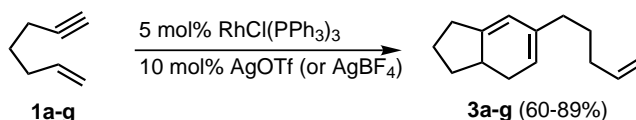
## Rhodium catalyzed [2+2+2] cyclizations of 1,6-enynes

Chang Ho Oh,\* Hye Rhyun Sung, Seung Hyun Jung and Young Mook Lim

Department of Chemistry, Hanyang University, Sungdong-Gu, Seoul 133-791, South Korea

1,6-Enynes in the presence of 5 mol%  $\text{RhCl}(\text{PPh}_3)_3$  and 10 mol% Ag(I) salts underwent [2+2+2]-cyclizations to give cyclohexadienes in good to excellent yields.

*Tetrahedron Letters* 42 (2001) 5493

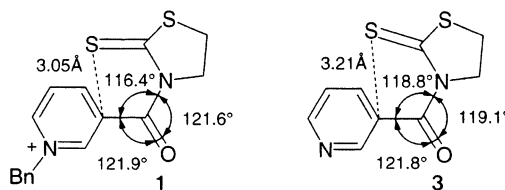


### Intra- and intermolecular interactions between a thiocarbonyl group and a pyridinium nucleus

*Tetrahedron Letters* 42 (2001) 5497

Shinji Yamada\* and Tomoko Misono

*Department of Chemistry, Faculty of Science, Ochanomizu University, Bunkyo-ku, Tokyo 112-8610, Japan*

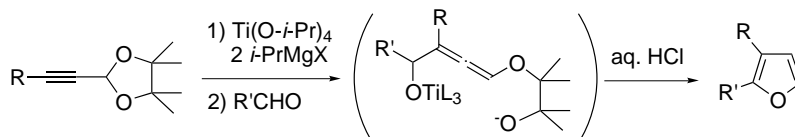


### One-pot preparation of 2-substituted and 2,3-disubstituted furans from 2-alkynyl tetramethylethylene acetals and aldehydes using a divalent titanium reagent $\text{Ti}(\text{O}-i\text{-Pr})_4/2 i\text{-PrMgX}$

*Tetrahedron Letters* 42 (2001) 5501

Xin Teng, Takeshi Wada, Sentaro Okamoto and Fumie Sato\*

*Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa 226-8501, Japan*



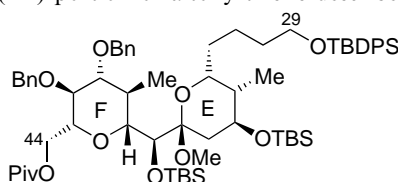
### Synthetic studies on altohyrtins (spongistatins): synthesis of the C29–C44 (EF) portion

*Tetrahedron Letters* 42 (2001) 5505

Takeshi Terauchi, Masataka Morita, Kyoko Kimijima, Yasuhiro Nakamura, Gouchirou Hayashi, Taisaku Tanaka, Naoki Kanoh and Masaya Nakata\*

*Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan*

Convergent synthesis of the C29–C44 (EF) portion of altohyrtins is described.

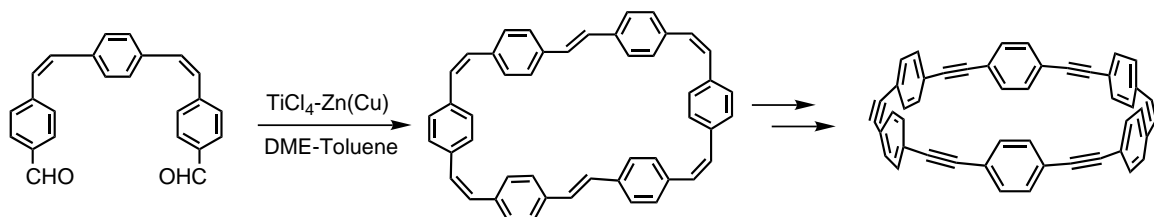


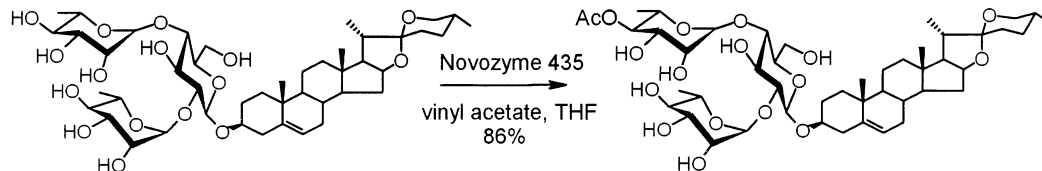
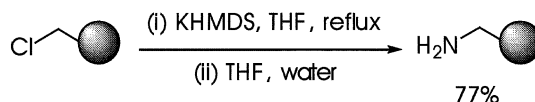
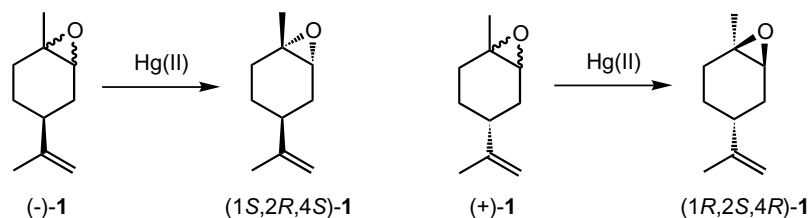
### The newly modified McMurry reaction toward the improved synthesis of cyclic paraphenylacetylenes

*Tetrahedron Letters* 42 (2001) 5509

Takeshi Kawase, Noriko Ueda, Kenji Tanaka, Yohko Seirai and Masaji Oda\*

*Department of Chemistry, Graduate School of Science, Osaka University, Toyonaka 560-0043, Japan*

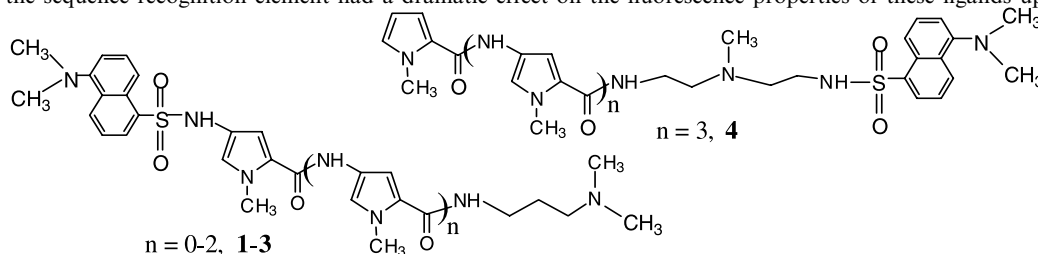


**Lipase-catalyzed regioselective acylation of diosgenyl saponins**Biao Yu,<sup>a,\*</sup> Guowen Xing,<sup>a</sup> Yongzheng Hui<sup>a,\*</sup> and Xiuwen Han<sup>b</sup><sup>a</sup>State Key Laboratory of Bio-organic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China<sup>b</sup>State Key Laboratory of Catalysis, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian 116023, China*Tetrahedron Letters 42 (2001) 5513***Non-nucleophilic base (KHMDS) mediated nucleophilic conversion of Merrifield resin into aminomethyl resin**David F. J. Sampson,<sup>a</sup> Robin G. Simmonds<sup>b</sup> and Mark Bradley<sup>a,\*</sup><sup>a</sup>Dept. of Chemistry, The University of Southampton, Southampton, Hampshire SO17 1BJ, UK<sup>b</sup>Eli Lilly & Co., Lilly Research Centre, Erl Wood Manor, Windlesham, Surrey GU20 6PH, UK*Tetrahedron Letters 42 (2001) 5517***Resolution of limonene 1,2-epoxide diastereomers by mercury(II) ions**Mariët J. van der Werf,<sup>a</sup> Hugo Jongejan<sup>b</sup> and Maurice C. R. Franssen<sup>b,\*</sup><sup>a</sup>Department of Applied Microbiology and Gene Technology, TNO Nutrition and Food Research, PO Box 360, 3700 AJ Zeist, The Netherlands<sup>b</sup>Laboratory of Organic Chemistry, Wageningen University, Dreijenplein 8, 6703 HB Wageningen, The Netherlands*Tetrahedron Letters 42 (2001) 5521***Facile synthesis of novel fluorescent distamycin analogues**

Santanu Bhattacharya\* and Mini Thomas

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

A facile synthesis of four distamycin analogues that bear the dansyl fluorophore is described. The nature of the linkage between the fluorophore and the sequence recognition element had a dramatic effect on the fluorescence properties of these ligands upon DNA binding.

*Tetrahedron Letters 42 (2001) 5525*

## The synthesis and crystal structure analysis of novel macrocyclic peroxides

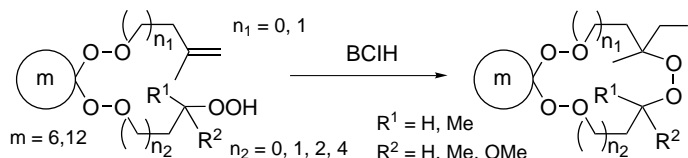
*Tetrahedron Letters 42 (2001) 5529*

Kevin J. McCullough,<sup>a,\*</sup> Toyonari Ito,<sup>b</sup> Takahiro Tokuyasu,<sup>b</sup> Araki Masuyama<sup>b</sup> and Masatomo Nojima<sup>b</sup>

<sup>a</sup>Department of Chemistry, Heriot Watt University, Edinburgh EH14 4AS, Scotland, UK

<sup>b</sup>Department of Materials Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565-0871, Japan

BCIH-mediated cyclization of unsaturated hydroperoxides results in the formation of a series of macrocyclic triperoxides with ring sizes in the range 11–16.



## Synthesis and properties of novel pyrrolidiny PNA carrying $\beta$ -amino acid spacers

*Tetrahedron Letters 42 (2001) 5533*

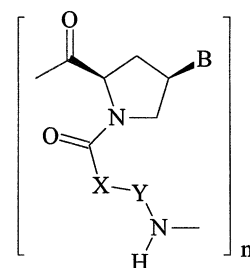
Tirayut Vilaivan,<sup>a,\*</sup> Chaturong Suparpprom,<sup>a</sup> Pongchai Harnyuttanakorn<sup>b</sup> and Gordon Lowe<sup>c</sup>

<sup>a</sup>Organic Synthesis Research Unit, Department of Chemistry, Faculty of Science, Chulalongkorn University, Phayathai Road, Patumwan, Bangkok 10330, Thailand

<sup>b</sup>Department of Biology, Faculty of Science, Chulalongkorn University, Phayathai Road, Patumwan, Bangkok 10330, Thailand

<sup>c</sup>Dyson Perrins Laboratory, Department of Chemistry, Oxford University, South Parks Road, Oxford, OX1 3QY, UK

Novel pyrrolidiny peptide nucleic acids bearing  $\beta$ -amino acid spacers have been synthesized and their binding to complementary oligonucleotides studied by gel electrophoresis.



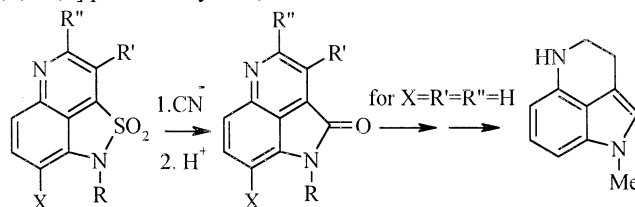
## Transformation of 2,2-dioxoisothiazolo[5,4,3-d,e]quinolines to pyrrolo[4,3,2-d,e]quinolin-2(1H)-ones

*Tetrahedron Letters 42 (2001) 5537*

Zbigniew Wróbel

Institute of Organic Chemistry, Polish Academy of Sciences, ul. Kasprzaka 44/52, 01-224 Warsaw, Poland

The conversion of 2,2-dioxoisothiazolo[5,4,3-d,e]quinolines to pyrrolo[4,3,2-d,e]quinolin-2(1H)-ones is described. Further transformation to a pyrrolo[4,3,2-d,e]quinoline system, a backbone of a number of marine alkaloids was performed on one example.



## Aza crown ether calix[4]arenes containing cation and anion binding sites: effects of metal ions towards anion binding ability

*Tetrahedron Letters 42 (2001) 5541*

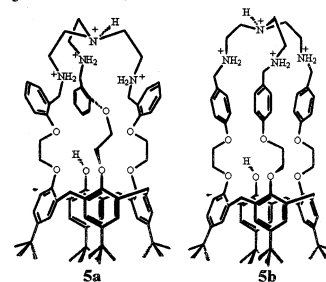
Thawatthai Tuntulani,<sup>a,\*</sup> Sirilux Poompradub,<sup>a</sup> Praput Thavornnyutikarn,<sup>a</sup> Nongnui Jaiboon,<sup>a</sup> Vithaya Ruangpornvisuti,<sup>a</sup> Narongsak Chaichit,<sup>b</sup> Zouhair Asfari<sup>c</sup> and Jacques Vicens<sup>c</sup>

<sup>a</sup>Department of Chemistry, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand

<sup>b</sup>Department of Physics, Faculty of Science, Thammasat University at Rangsit, Pathumthani 12121, Thailand

<sup>c</sup>ECPM, Group de Chimie des Interactions Moléculaires Spécifiques, associé au CNRS, 25, rue Becquerel, F-67087 Strasbourg Cedex 2, France

Compounds **5a** and **5b** were synthesized and their complexation with halide anions in the presence of various counteranions was studied by <sup>1</sup>H NMR titrations.

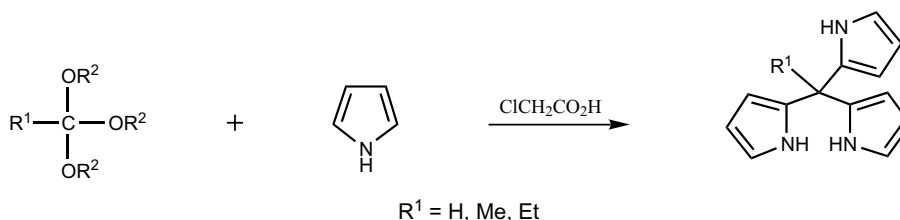


### Reactions between pyrrole and orthoesters: preparation of tri-(pyrrol-2-yl)alkanes

Colin B. Reese\* and Hongbin Yan

Department of Chemistry, King's College London, Strand, London WC2R 2LS, UK

*Tetrahedron Letters* 42 (2001) 5545



### Carbohydrate-based routes to salicylate natural products: formal total synthesis of (+)-apicularen A from D-glucal

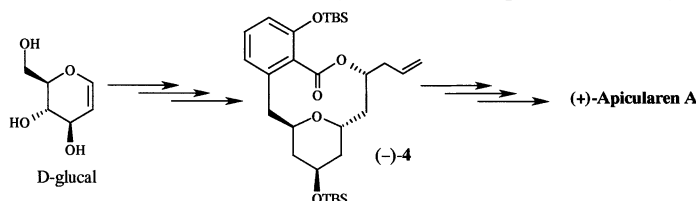
Arwel Lewis,<sup>a</sup> Ian Stefanuti,<sup>a</sup> Simon A. Swain,<sup>a</sup> Stephen A. Smith<sup>b</sup> and Richard J. K. Taylor<sup>a,\*</sup>

<sup>a</sup>Department of Chemistry, University of York, Heslington, York YO10 5DD, UK

<sup>b</sup>GlaxoSmithKline, New Frontiers Science Park, Harlow, Essex CM19 5AW, UK

A synthesis of apicularen analogue (–)-4 in 18 steps from D-glucal is reported. As (+)-4 has been converted into apicularen A in 8 steps, this constitutes a formal total synthesis of this potent, naturally occurring anti-cancer agent.

*Tetrahedron Letters* 42 (2001) 5549

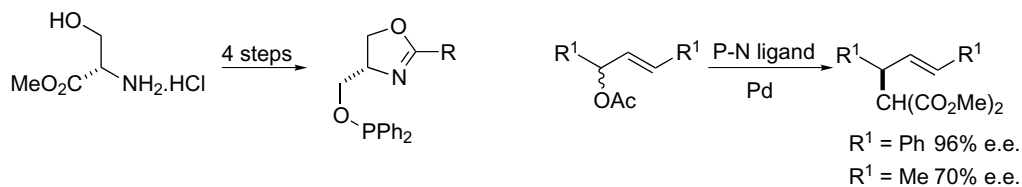


### Simple phosphinite–oxazoline ligands for asymmetric catalysis

Geraint Jones and Christopher J. Richards\*

Department of Chemistry, Cardiff University, PO Box 912, Cardiff CF10 3TB, UK

*Tetrahedron Letters* 42 (2001) 5553

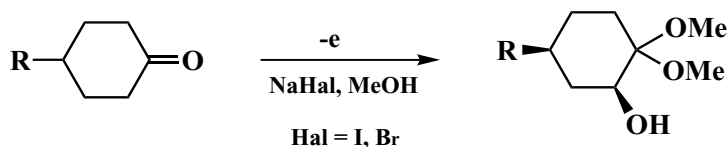


### Stereoselective electrochemical transformation of 4-substituted cyclohexanones into *cis*-5-substituted-2,2-dimethoxycyclohexanols

Michail N. Elinson,\* Sergey K. Feducovich, Dmitry E. Dmitriev, Alexander S. Dorofeev, Anatolii N. Vereshchagin and Gennady I. Nikishin

N.D. Zelinsky Institute of Organic Chemistry, Leninsky prospect 47, 119991 Moscow B-334, Russia

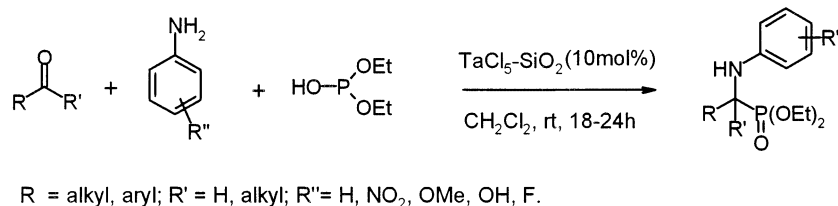
*Tetrahedron Letters* 42 (2001) 5557



### Three component coupling catalyzed by TaCl<sub>5</sub>-SiO<sub>2</sub>: synthesis of $\alpha$ -amino phosphonates

*Tetrahedron Letters 42 (2001) 5561*

S. Chandrasekhar,\* S. Jaya Prakash, V. Jagadeshwar and Ch. Narsihmulu  
Indian Institute of Chemical Technology, Hyderabad 500 007, India



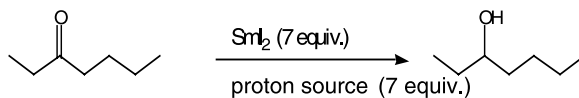
### Chelating alcohols accelerate the samarium diiodide mediated reduction of 3-heptanone

*Tetrahedron Letters 42 (2001) 5565*

Anders Dahlén and Göran Hilmersson\*

*Organic Chemistry, Department of Chemistry, Göteborg University, SE-412 96 Göteborg, Sweden*

The SmI<sub>2</sub>-mediated reduction of heptanone to heptanol is accelerated 255 times by the addition of di(ethylene glycol). The number of ether oxygens in the proton source are crucial for the observed increase in rate.

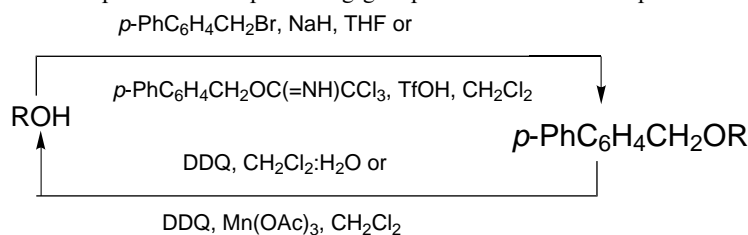


### Development of *p*-phenylbenzyl as a new protecting group: protection and deprotection of alcohols

*Tetrahedron Letters 42 (2001) 5571*

G. V. M. Sharma\* and Rakesh

*D-211, Discovery Laboratory, Organic Chemistry Division III, Indian Institute of Chemical Technology, Hyderabad 500 007, India*  
*p*-Phenylbenzyl (PPB) is developed as a new protecting group for alcohols and deprotected oxidatively with DDQ.



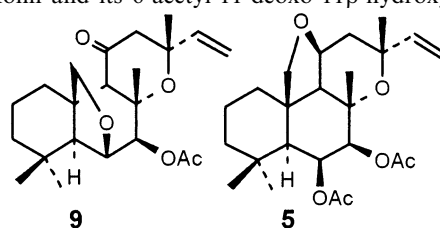
### Hypoiodite reactions of 1,9-dideoxyforskolin and its 6-acetyl-11-deoxy-11 $\beta$ -hydroxy derivative

*Tetrahedron Letters 42 (2001) 5575*

H. Gurulingappa and Sujata V. Bhat\*

*Department of Chemistry, Indian Institute of Technology-Bombay, Powai, Mumbai 400076, India*

Hypoiodite reactions of 1,9-dideoxyforskolin and its 6-acetyl-11-deoxy-11 $\beta$ -hydroxy derivative gave the corresponding C-20 oxido derivatives **9** and **5**, respectively.



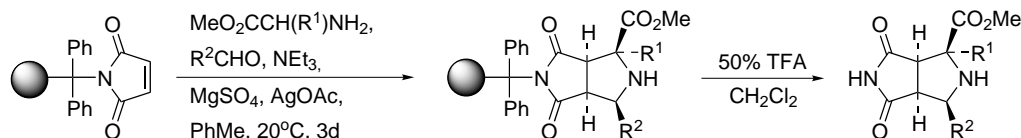
# Pyrrolidine synthesis on polystyrene supports: development of a 'one-pot' dipolar cycloaddition strategy

*Tetrahedron Letters 42 (2001) 5579*

Anthony G. M. Barrett,<sup>a,\*</sup> Raymond J. Boffey,<sup>a</sup> Mathias U. Frederiksen,<sup>a</sup> Christopher G. Newton<sup>b</sup> and Richard S. Roberts<sup>a</sup>

<sup>a</sup>Department of Chemistry, Imperial College of Science, Technology and Medicine, South Kensington, London SW7 2AY, UK

<sup>b</sup>Aventis Pharma, Dagenham Research Centre, Rainham Road South, Dagenham, Essex RM10 7XS, UK



# Structural characterisation of C<sub>30</sub> highly branched isoprenoid alkenes (rhizenes) in the marine diatom *Rhizosolenia setigera*

*Tetrahedron Letters 42 (2001) 5583*

Simon T. Belt,<sup>a,\*</sup> W. Guy Allard,<sup>a</sup> Guillaume Massé,<sup>a,b</sup> Jean-Michel Robert<sup>b</sup> and Steven J. Rowland<sup>a</sup>

<sup>a</sup>Petroleum and Environmental Geochemistry Group, Department of Environmental Sciences, University of Plymouth, Drake Circus, Plymouth PL4 8AA, Devon, UK

<sup>b</sup>ISOMer, Faculté des Sciences et des Techniques, Université de Nantes, 2 Rue de la Houssinière, 44027 Nantes Cedex 3, France

Four C<sub>30</sub> HBI alkenes (including **1**) have been isolated from the marine diatom *Rhizosolenia setigera* and characterised by NMR spectroscopy.

